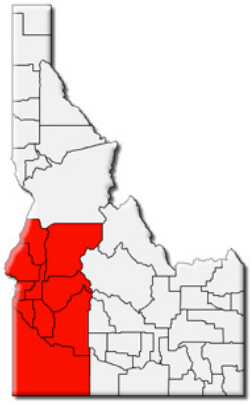
Region 3 Broadband Investment Plan



Priority Need

[1] The Southwestern Region of Idaho, Region 3, is the fastest growing region in the state. Ten counties are part of Idaho's Region 3 including Ada, Adams, Boise, Canyon, Elmore, Gem, Owyhee, Payette, Valley, and Washington. According to 2009 data, Boise is the largest city in the state with over 200,000 people and is also the capitol of Idaho. Other than Boise, only Meridian and Nampa have populations greater than 50,000 in Region 3. Caldwell is the 7th largest city in the state with just over 43,000 people. With some exceptions, cities and towns in Region 3 are generally smaller than 10,000 and often smaller than 5,000 people. Between 2000 and 2009, Ada County experienced a net influx of 83,750 people and Canyon County and growth of 55,172. These two counties were the fastest growing in the region. According to the 2010 Census, in Ada County, there are more than 373 people per square mile, followed by Canyon County with 322 people per square mile and Payette County with 56 people per square mile. On the other end of the spectrum, Adams, Boise, Owyhee, and Valley Counties have less than 5 people per square mile. Canyon County has the highest percentage of Latinos/Hispanics in the state with 23.9% compared 2% of the State's population.

[2] In general, the projected future growth prospects are positive for most of region's economic drivers. The areas of Health Care, Administrative and Support and Waste Management and Remediation Services, Retail Trade, and Construction are expected to add significant jobs over the ten-year period beginning in 2006 and ending in 2016.

[3] Nearly all engineering occupations and information technology (IT) related occupations have been and continue to be in high demand. Engineering, IT, and other growing fields such as healthcare and education will require workers with higher levels of education. Occupations requiring an education at the Master's level or higher are expected to grow by nearly 27 percent from 2008 to 2018. This is a significantly higher rate than the 18 percent growth rate projected for occupations that require a bachelor's degree or less than a bachelor's degree (Idaho Department of Labor).

[4] Only 14.4% of Idaho's population has a Bachelors Degree or higher, which is 10% lower than the US average of 24.4%. The average for Region 3 is 16.9%, slightly higher than Idaho as a whole; Ada and Valley Counties have rates of 31.2% and 26.3%, exceeding the state average. In Region 3, Boise, Ada, Elmore, and Valley Counties have a higher percentage of the population with a High School Diploma or higher than the State and national averages. Both Owyhee 67.6% and Payette 74.5% Counties have the lowest percentage of the population with a High School Diploma. According to the

June 2010 US Census Bureau report on Public Education Finances, Idaho has been rated 50th of the state in per pupil spending.

[5] Overall, the occupational and industry trends in the Southwestern Region point to the need for effective education and training networks including the continued leveraging of distance delivery technologies supporting access at home and at places of work. All of the area colleges leverage broadband to deliver distance-learning classes, however college and university IT staff members mention problems with two-way interactive video and high definition technology.

In the 2011 legislative session, Senate Bill 1128 passed which requires high school students to take two distance learning courses before graduation. If this is to be achievable, students must have sufficient broadband bandwidth to access content from home. According to Idaho Education Network (IEN), sufficient bandwidth exists in most high schools to implement this new bill.

A table showing the percent of population in census blocks with advertised broadband speed available by county is listed below (Source: LinkIDAHO Provider Data 2010).

Percent of Region/County Population living in Census Blocks with Maximum Download Speeds Offered at:

Region/County	10 Mbps or greater	3 - 10 Mbps	Less than 3 Mbps	Mobile Option Only	No option greater than 768 kbps
Region 3	**92.72**	**5.63**	**1.57**	**0.94**	**0.08**
Ada	97.5	2.49	0.02	0.01	0
Adams	85.66	0.78	13.56	8.78	0
Boise	39.49	21.11	31.91	7.94	7.5
Canyon	92.51	7.27	0.21	0.01	0
Elmore	88.97	4.26	6.75	5.72	0.02
Gem	73.86	24.96	1.19	0.83	0
Owyhee	52.82	29.05	18	16.84	0.13
Payette	85.6	12.3	2.1	0.94	0
Valley	57.15	19.39	23.46	16.42	0
Washington	74.23	13.53	12.24	5	0

One of the objectives of Region 3's 2009-2014 Comprehensive Economic Development Strategy (CEDS) is to *"promote Southwest Idaho workers as being well educated and trained for the existing and future jobs in the region."* As part of this, they intend to promote training opportunities, promote education programs in regional education institutions that prepare students for jobs in the region, and align industry needs with training and education programs in the region. A barrier identified through the

CEDS was *"Job-losses, out-migration and lack of available development capital in rural communities."*

- *Many of the rural communities in the region are facing large losses in jobs and their trained and educated workforce. Workers are moving out of rural communities to find jobs elsewhere. This puts rural communities at a disadvantage when trying to attract new businesses or maintain and expand existing businesses. Communities can also work together to increase their investment attractiveness by obtaining broadband accessibility.*
- *Many businesses will not move to an area without access to high speed Internet. If communities can work together with private or public partners to bring broadband to their towns they will create an environment where economic development can flourish. Broadband can also help local businesses connect to markets in the rest of the world."*

2: Overview of Regional Opportunity

A diverse group of LinkIDAHO stakeholders has been meeting since December 2010 to assess regional needs that can be advanced by more available and more widely utilized broadband services. Region 3's planning team decided to **assess broadband needs in Canyon County.** This county was chosen because it is a growing area, has both urban and rural areas, many health facilities, K-12 and higher education, an enterprise zone, and agriculture. The team also has leadership engaged in working with this county. The assessment and process conducted in Canyon County could be replicated in other counties or areas within the region as well.

LinkIDAHO 2010 provider data shows the following information about business and household broadband availability in Canyon County:

Number of Households per Download Speeds for Canyon County

Total Number of Households: 48,841
Number of Households in Census Blocks with Mobile Broadband only: 38
Number of Households in Census Blocks with Advertised speeds of Less than 768 kbps or No broadband available: 232
Number of Households in Census Blocks with Advertised speeds of 768 kbps - 3 Mbps: 158
Number of Households in Census Blocks with Advertised speeds of 3 Mbps - 10 Mbps: 4,690
Number of Households in Census Blocks with Advertised speeds of 10 Mbps - 25 Mbps: 36,396
Number of Households in Census Blocks with Advertised speeds of 25 Mbps or greater: 7,595

Number of Business Firms per Download Speeds for Canyon County

Total Number of Business Firms: 8,572
Number of Business Firms in Census Blocks with Mobile Broadband only: 6
Number of Business Firms in Census Blocks with Advertised speeds of Less than 768 kbps or No broadband available: 122
Number of Business Firms in Census Blocks with Advertised speeds of 768 kbps - 3 Mbps: 33
Number of Business Firms in Census Blocks with Advertised speeds of 3 Mbps - 10 Mbps: 1,239
Number of Business Firms in Census Blocks with Advertised speeds of 10 Mbps - 25 Mbps: 5,798
Number of Business Firms in Census Blocks with Advertised speeds of 25 Mbps or greater: 1,502

3: Proposed Broadband Investment

[1] The investment priority for Region 3 is to assess broadband availability and use in Canyon County.

The following table provides an overview of key investments:

Type of Investment	Activities	Responsibility	Dollar Value[1]
Leadership	• Assemble Broadband Infrastructure and an Outreach and Awareness committees and identify leadership for activities.	Dave Ferdinand & Kendelle Vogt	TBD
Research	• Administer broadband demand assessment. • Collect broadband need data via the CEDS. • Identify broadband education and training needs and share broadband training resources. • Identify and promote policy that could support broadband expansion efforts.	Identify lead for survey process Rem & Kendelle Outreach & Awareness Committee TBD	
Awareness Programs	• Generate awareness and increase use of broadband learning resources.	Outreach & Awareness Committee	
Address Broadband Service Gaps	• Engage providers to find solutions critical broadband service gaps. • Apply for broadband infrastructure grants if appropriate.	Rem	

[1] - Note the "dollar value" of investment includes volunteer time, allocation of existing staff to project tasks, new paid staff and other costs. See budget below.

4: Key Tasks and Timeline

Phase 1: Detailed Infrastructure Needs Assessment

Summer through Fall 2011

Task 1.1. Identify key leaders in Canyon County that could support and engage in a broadband assessment and outreach effort. Consider people from Nampa, Caldwell, the Western Alliance, and others. Convene a meeting to orient them to project. Assemble committees including an Broadband Infrastructure Committee and an Outreach and Awareness Committee. The Infrastructure committee should look at roads, fiber, and conduit. (Lead: Kendelle Vogt & David Ferdinand)

Task 1.2. Administer the demand survey to businesses, government entities, public safety, health care, tribes and residents in region that need higher speed broadband services. Identify gaps and needs for economic development, education, healthcare, and public safety that could be addressed with broadband. Map unmet demand needs on the Idaho Demand Map. Health care providers and public safety entities may need higher bandwidth to meet mandates, support redundancy and public safety needs. Idaho Department of Administration has GIS data from the statewide databases of the public structures. (Paul Martinez a resource). (Lead: Dave Ferdinand. See if COSSA or CWI students could assist.)

Task 1.3. Sage can add broadband and telecommunications-related questions into Comprehensive Economic Development Strategy (CEDS). (Lead: Rem & Kendelle)

Task 1.4 Verify LinkIDAHO Community Anchor Institution data if needed. (Lead: Dave Ferdinand)

Phase 2: Promote Awareness of Broadband Opportunities & Training Resources

Winter 2011 - Summer 2012

Task 2.1 Identify broadband training resources for schools, libraries, universities, colleges, government, public safety, and employers. The health and welfare system, Adult Basic Education (ABE), the State Vocational Education agency, and the Department of Labor (DOL) may have training resources. Develop a list of Learning Express resources available by library. (Lead: Outreach & Awareness Committee)

Task 2.2. Generate awareness and use of broadband resources. Identify strategic organizations that can share out this information and offer trainings such as libraries and Department of Labor. (Lead: Outreach & Awareness Committee)

Task 2.3. Identify political, organizational and budgetary forces that might affect need for broadband access, such as the recently passed legislation that requires high school students to take two distance learning courses before graduation. (Lead: TBD)

Phase 3: Bridge Infrastructure Gaps

Spring – Summer, 2012

Task 3.1. Analyze Broadband Demand survey results and examine Region 3's Idaho Demand Map to identify areas where high broadband demand exists and that need is currently not being met. Review available data including provider reported availability, demographic data, and other information to prioritize unserved areas for potential expansion of broadband service. Focus priority on areas where a business case for at least one provider for expansion can be identified. Infrastructure projects should be

forward looking to continue to build capacity for mobile broadband. (Lead: Rem will lead Broadband Infrastructure Committee)

Task 3.2. Identify funding sources, and examine cost models and creative solutions to bridge gaps. To make the case for investment, identify cost savings organizations can achieve through decreased travel, time away from the office, economic development benefits, etc. (Lead: Broadband Infrastructure Committee)

Task 3.3. Organize regional support for provider, municipal or other organizational loan/grant applications as may be needed to advance solutions to broadband gaps in unserved or underserved areas. (Lead: TBD)

Task 3.4. Examine and forward policies and resources that can support broadband development, such as right of way and pole attachment policies, E-rate funding and Universal Service Funding (USF), which is an fee assessment on phone revenues. A resolution could be proposed that requires counties and cities to install conduit in open trenches. (Lead: TBD)

5: Budget

Budget Category	Project 2011 Budget	Project 2012 Budget
Infrastructure	None	To Be Determined
Equipment	None	To Be Determined
Paid Staff: Contributed Paid Staff Time Funded Paid Staff Time	To Be Determined	To Be Determined
Volunteer Time: Number of Volunteer Hours Value of Volunteers	To Be Determined	To Be Determined
Other: In-kind Research Skills Funded Contract Skills	To Be Determined	To Be Determined

Infrastructure Funding: TBD

Two connectivity problem areas in Region 3 are the connection from Horseshoe Bend to Boise via

Eagle and the connection between McCall to New Meadow to Council. There is a fiber ring in Region 3 but no single provider has all of it—it is divided up between multiple providers, which enables maximum pricing control by the incumbents.

Some potential funding options to support infrastructure related proposals include:

- USDA
- E-rate
- Universal Service Fund (USF)
- Library and education-related grants
- Private sector funding

Equipment and Supplies: TBD

Paid Staff: TBD

Volunteer Time: TBD

Other Investment: TBD

6: Anticipated Outcomes and Impacts

The proposed broadband investments are anticipated to result in several important positive outcomes and impacts for the region including but not limited to:

- Improve access to and use of education and workforce training resources.
- Legislative, business, education leaders in the region will be better prepared to make future decisions and policies around broadband.
- Reduced communication and travel costs.
- Improve use of public computing resources to support broadband access for the underserved or low-income communities.
- Policies will support broadband development, such as broadband being considered critical infrastructure.
- Expansion of broadband service investment in underserved areas.

Three-Year Objectives

The following objectives are targeted for Region 3 by 2014:

- Rural communities will maintain or increase population.
- Both urban and rural areas in Region 3 will attract and retain businesses.
- Eighty-five percent of "rural" homes in the region will have access to a broadband connection of 3.0 Mbps download or greater.
- At least 25% of rural residents in the region will use a broadband service connection to access training or educational content.

7: Monitoring and Evaluation

[1] Subject to available funding, LinkIDAHO and an in-state monitoring and evaluation partner will support Region 3 design and implement a comprehensive monitoring and evaluation effort. The monitoring process will focus initially on collecting data on inputs, activities and processes. The evaluation process focuses on outputs, outcomes and impacts.

Inputs → Activities → Processes → Outputs → Outcomes → Impact

[2] Examples of inputs include such things as number of volunteer hours, hours of paid staff time, number of local partners engaged or time spent in planning meetings. Activities and Processes are such things as progress towards collection of baseline data on broadband access and distance learning resources. The measurement and evaluation team will create on-line tools to support this necessary data collection.

[3] The evaluation process will focus initially on outputs and outcomes defined by the above objectives, for example, expanded awareness of education and training resources, usability of broadband for education and training, or improving broadband connectivity. Impact data will go beyond outputs and outcomes to determine such things as the economic benefits of distance learning initiatives on the region. As a data point, the Monitoring and Evaluation Framework will incorporate broadband provider/subscriber data such as the Federal Communication Commission's Form 477 (or equivalent).

[4] Subject to available funding, a detailed monitoring and evaluation plan will be designed and implemented early in 2012.

8: Sustainability Plan

[1] Success in attracting the targeted broadband investments will depend significantly on an upfront project design that assures the initiative will be sustainable into the future. This sustainability will be achieved through the strategic engagement and leveraging of existing organized efforts in the region that include but are not limited to:

- Collaboration among multi-sector stakeholders,
- Policies and initiatives that support broadband expansion and use,
- Engagement and partnership with area broadband service providers, and
- Outreach and engagement to appropriate state government entities and legislative audiences.

Organizations will need to identify a revenue stream for ongoing revenue and maintenance of connectivity and broadband once it exists.

9: Appendices

Supporting data addressing topics such as:

Appendix A: Regional Description

[1] Centrally located in Region 3, Boise is the largest city in the state with over 200,000 people and is

also the capitol of Idaho. Other than Boise, only Meridian and Nampa have populations greater than 50,000. Caldwell is the 7th largest city in the state with just over 43,000 people. With some exceptions cities and towns in the region are generally smaller than 10,000 and often smaller than 5,000 people.

[2] In 2009, and estimated 680,660 people live in the Region 3. Over one-half the region's population lives in the largest county, Ada 384,656. Excluding Ada County, Canyon County population 186,615 is larger than all other counties combined in Region 3. Adams County is the smallest in the region, with a 2009 population under 4,000 people.

[3] Overall, population in the region grew by 145,008 people or 12.3 percent between 2000 and 2009. This growth rate is much faster than the statewide average of -0.3%. Between 2000 and 2009, Ada County experienced a net influx of 83,750 people and Canyon County and growth of 55,172. These two counties were the fastest growing in the region. Only one county, Elmore, experience a population decline over this same time period. Payette County experienced a 2,521 population gain. Adams, Gem, Owyhee, Valley and Washington counties all experienced a population gain less than 1,300 people between 2000 and 2009.

[4] Population density also differs substantially across the region. In Ada County, there are more than 360 people per square mile, followed by Canyon County with 309 people per square mile and Payette County with 56.3 people per square mile. On the other end of the spectrum, Adams, Boise, Owyhee, and Valley Counties have less than 5 people per square mile. Overall, average population density for the region approximately 78.4 people per square compared to 1.8 people per square mile for the state.

[5] According to 2008 Census estimates, 95.1% of the region's population are white compared to 93.9% of the states population that are white. However, there are important racial diversity exceptions among individual counties. Notably, 25.6% of Owyhee County’s population is Hispanic and 3.5% are American Indian. Hispanics represent 21.5% of the population in Canyon County and 17.7% of the population in Washington County compared 2% of the State's population. Approximately 2% of the Ada population is Asian compared to an average of 0.4% of the State's overall population.

[6] Only 14.4% of Idaho’s population has a Bachelors Degree or higher, which is 10% lower than the US average of 24.4%. The Region 3 average is 16.9%, slightly higher than Idaho as a whole; Ada and Valley Counties rates of 31.2% and 26.3% exceed the state average. Overall, the proportion of people older than 25 with a high school diploma for Idaho is higher than the national average, 82.9% versus 80.4%. In Region 3, Ada, Elmore, and Valley Counties have a higher percentage of the population with a High School Diploma or higher than the State and national averages. Both Owyhee 67.6% and Payette 74.5% Counties have the lowest percentage of the population with a High School Diploma.

Appendix B: Regional Economy

[1] Median Household Income - The 2007 average per capita income for Region 3 is $29,439 compared to $24,789 for the state. Ada County has the highest 2007 per capita income estimated to be $43,028. Valley County has an estimated 2007 per capita income in excess of $38,000. Adams, Boise, Elmore, Gem, Owyhee, Payette, and Washington Counties have a per capita income lower than $30,000. Canyon has the lowest 2007 per capita income in the region at $22,278.

[2] The Idaho Department of Labor Industry Projections non-farm employment growth by industry for each of the state's six development regions. Region 3 is a part of the Southwestern Idaho Labor Market region including Ada, Adams, Boise, Canyon, Elmore, Gem, Owyhee, Payette, Valley, and Washington counties. The following table identifies the projected employment change by major sector for the North Central Labor Market.

- Total Employment net new jobs 74,401
- Self-Employed and Unpaid Family net new jobs -869
- Agriculture, Forestry, Fishing and Hunting net new jobs 847
- Mining net new jobs 140
- Utilities net new jobs 254
- Construction net new jobs 6,074
- Manufacturing net new jobs 1,625
- Wholesale Trade net new jobs 624
- Retail Trade net new jobs 6,326
- Transportation and Warehousing net new jobs 2,140
- Information net new jobs 2,737
- Finance and Insurance net new jobs 4,011
- Real Estate and Rental and Leasing net new jobs 864
- Professional, Scientific, and Technical Services net new jobs 4,624
- Management of Companies and Enterprises net new jobs 1,567
- Administrative and Support and Waste Management and Remediation Services net new jobs 11,077
- Educational Services (all ownership) net new jobs 5,616
- Health Care and Social Assistance excluding federal net new jobs 13,866
- Arts, Entertainment, and Recreation net new jobs 508
- Accommodation and Food Services net new jobs 5,447
- Other Services (except Public Administration) net new jobs 2,416
- Government (all federal, state w/o education & hospitals, local w/o education & hospitals) net new jobs 4,491
- Unknown net new jobs -2

[3] In general, the projected future growth prospects are positive for most of the economic drivers in the region. Job growth is expected in health care, administrative support, and waste management and remediation services, retail trade, and construction are expected to add significant jobs over the ten year period beginning in 2006 and ending in 2016. Between 2006 and 2016, self-employment is projected to decline for the Southwestern Labor Market Region and Manufacturing is expected to have a slow growth rate of 4.8%.

[4] Major Employers - The top five employers in Region 3 typically employ at least 2,000 people and up to 5,999 people. The largest employers in the region are Micron Technology and St. Luke’s Regional Medical Center both located in Ada County. However, the largest employers the majority of the counties in Region 3 typically employ 20 to 200 people. These employers are reflective of the regions economic drivers described above, led in particular by education, local government, and technology industries.

NOTE OCCUPATIONAL PROJECTIONS FOR WORKFORCE DEVELOPMENT REGIONS ARE AVAILABLE IN EXCEL FORMAT AT
OCCUPATIONAL PROJECTIONS FOR WORKFORCE DEVELOPMENT REGIONS
2008 - 2018 Projections
http://lmi.idaho.gov/Occupations/LongTermProjections/20082018RegionalLon...

[6] The following occupational categories are projected to result in the ten largest net job growth between 2008 and 2018 within the Idaho Department of Labor, Southwestern Idaho Occupation Projections of which Region 3 is a part.

- Total, All Occupations net new jobs 58,212
- Office and Administrative Support Occupations net new jobs 9,825
- Sales and Related Occupations net new jobs 6,112
- Food Preparation and Serving Related Occupations net new jobs 4,902
- Healthcare Practitioners and Technical Occupations net new jobs 4,866
- Retail Sales Workers net new jobs 4,519
- Education, Training, and Library Occupations net new jobs 3,574
- Transportation and Material Moving Occupations net new jobs 3,493
- Information and Record Clerks net new jobs 3,471
- Food and Beverage Serving Workers net new jobs 3,080
- Health Diagnosing and Treating Practitioners net new jobs 3,043

[7] These projections emphasize job growth is projected to grow across a wide spectrum of occupational skill categories. Some fields such as Heath Care and Education will require workers with higher levels of education. Others such as Food and Beverage Serving may require less formal post high school education.

[8] Overall the occupational and industry trends framing economic development in the Southwestern Region, Region 3, point to the need for effective education and training networks including the continued leveraging of distance delivery technologies supporting access at home and at places of work.

[9] Workforce Challenges - Nearly all engineering occupations and IT related occupations have been and continue to be in high demand. Currently, a surplus of workers exists in nearly every other area of the workforce due to the economic downturn. Also, the housing downturn has significantly reduced people's mobility, thereby burdening cross-border hiring both in and out-of-state.

[10] Occupations requiring an education at the Master's level or higher is expected to grow by nearly 27 percent from 2008 to 2018. This is a significantly higher rate than the 18 percent growth rate projected for occupations that require a bachelor's degree or less than a bachelor's degree.

[11] Commuting Statistics - Over 40 percent of people employed in the city of Boise live outside the city. About 18 percent of people living within Boise commute out of the city to a surrounding city. The majority of the people that commute to work each day commute from the city of Meridian or the city of Nampa, with many more commuting from Eagle, Garden City, and Caldwell.

Appendix C: Broadband Availability

Twenty-one providers across five categories responded to the June 2010 LinkIDAHO "provider survey" indicating they deliver a broadband service within the South Western Region. Among those providers, eight report delivering Digital Subscriber Line Service, two cable providers offer a broadband service, three telephone companies deliver broadband to the customer with a direct optical fiber connection, three provide fixed wireless broadband service, and five provide mobile broadband service. The table below summarizes the number of broadband service providers offering service in each county of the region for the different technologies.

	Telco xDSL	Cable	Fiber	Fixed Wireless	Mobile Wireless
Reported Maximum Download Speeds	**768 Kbps - 25 Mbps**	**10 - 25 Mbps**	**1.5 Mbps - 1 Gbps**	**768 Kbps - 6 Mbps**	**768 Kbps - 1.5 Mbps**
Ada	**2**	**1**	**3**	**2**	**5**
Adams	**3**	**1**	**0**	**0**	**2**
Boise	**4**	**1**	**0**	**2**	**4**
Canyon	**3**	**1**	**1**	**2**	**5**
Elmore	**2**	**1**	**1**	**0**	**3**
Gem	**4**	**1**	**0**	**2**	**5**
Owyhee	**4**	**1**	**0**	**2**	**3**
Payette	**3**	**1**	**0**	**1**	**4**
Valley	**3**	**1**	**0**	**0**	**2**
Washington	**3**	**0**	**0**	**0**	**1**

A list of broadband providers can be found here.

Telco xDSL

Digital Subscriber Line (DSL) is the most prevalent of broadband services in the region. DSL has been the primary broadband technology deployed by telephone companies for quite some years because it makes good use of existing phone lines. South Western Idaho providers responding the LinkIDAHO survey report maximum download speeds ranging between 768 Kbps to 25 Mbps over DSL lines. Many factors determine the potential delivered speed. At least two DSL provider operates in every count of the region. Qwest reports offering DSL in almost every county of the South Western Region with the exception of Adams and Valley Counties.

Cable

Two cable TV companies also offer high speed internet service. Broadband is provided over a combination of coaxial and fiber lines with speeds. Cable One offers a high speed internet service in all South Western Counties with the exception of Washington and Elmore Counties. Windjammer Cable reports offering a cable service in Elmore County. No companies report offering service in Washington County. Maximum download speeds offered by cable providers responding to the LinkIDAHO survey are between 10 Mbps and 25 Mbps.

Fiber

American Fiber Systems, CTC, and Level 3 Communications, LLC offer service in Ada County. American Fiber Systems also offers service in Canyon County and Level 3 Communications, LLC offers service in

Elmore County. No companies provide service in the remaining counties in the South Western Region. Fiber has an advantage over DSL in that high speeds can be transmitted further from the primary network serving equipment. The companies providing fiber to the customer connections in South Western Idaho report maximum download speeds in the range between 1.5 Mbps to 1 Gbps.

Fixed Wireless

Three fixed wireless companies service the South Western Region of Idaho. BitSmart and JAB Braodband - DIGIS provide broadband to the customer service in Ada, Boise, Canyon, and Gem Counties. JAB Broadband - DIGIS provides service to Payette County. Both Filer Mutual Telephone Company and JAB Broadband - DIGIS service Owyhee County. No companies provide fixed wireless broadband to Adams, Elmore, Valley, and Washington Counties. The companies providing fixed wireless to the customer connections in South Western Idaho report maximum download speeds in the range between 768 Mbps to 6 Mbps.

Mobile Wireless

Five companies provide mobile wireless broadband to the South Western Region. Verizon Wireless provides service to all ten counties in the region. AT&T Mobility LLC, Cricket Communications, Sprint, and T-Mobile also offer broadband service in selected areas of the region. Ada, Canyon, and Gem Counties have five different mobile wireless broadband providers and Payette and Boise Counties have four. Other Counties have one, two, or three mobile wireless providers. Mobile wireless carriers providing a broadband service in the region indicate the maximum download speed they offer is between 768 Kbps and 1.5 Mbps.

Regional Differences in Broadband Service

The tables appearing below illustrate the disparity of broadband access across the Region:

Percent Population in Census Blocks with Advertised Maximum Download Speeds Available At:

Percent of Region/County Population living in Census Blocks with Maximum Download Speeds Offered at:					
Region/County	10 Mbps or greater	3 - 10 Mbps	Less than 3 Mbps	Mobile Option Only	No option greater than 768 kbps
Region 3	**92.72**	**5.63**	**1.57**	**0.94**	**0.08**
Ada	97.5	2.49	0.02	0.01	0
Adams	85.66	0.78	13.56	8.78	0
Boise	39.49	21.11	31.91	7.94	7.5
Canyon	92.51	7.27	0.21	0.01	0
Elmore	88.97	4.26	6.75	5.72	0.02
Gem	73.86	24.96	1.19	0.83	0
Owyhee	52.82	29.05	18	16.84	0.13
Payette	85.6	12.3	2.1	0.94	0
Valley	57.15	19.39	23.46	16.42	0
Washington	74.23	13.53	12.24	5	0

Additional data on business and household speed availability by census block follows:

Number of Business Firms per Download Speeds for Region 3

Total Number of Business Firms: 38,060
Number of Business Firms in Census Blocks with Mobile Broadband only: 490
Number of Business Firms in Census Blocks with Advertised speeds of Less than 768 kbps or No broadband available: 1,115
Number of Business Firms in Census Blocks with Advertised speeds of 768 kbps - 3 Mbps: 913
Number of Business Firms in Census Blocks with Advertised speeds of 3 Mbps - 10 Mbps: 2,991
Number of Business Firms in Census Blocks with Advertised speeds of 10 Mbps - 25 Mbps: 22,471
Number of Business Firms in Census Blocks with Advertised speeds of 25 Mbps or greater: 11,640

Number of Households per Download Speeds for Region 3

Total Number of Households: 233,054
Number of Households in Census Blocks with Mobile Broadband only: 3,463
Number of Households in Census Blocks with Advertised speeds of Less than 768 kbps or No broadband available: 3,375
Number of Households in Census Blocks with Advertised speeds of 768 kbps - 3 Mbps: 5,728
Number of Households in Census Blocks with Advertised speeds of 3 Mbps - 10 Mbps: 13,608
Number of Households in Census Blocks with Advertised speeds of 10 Mbps - 25 Mbps: 142,364
Number of Households in Census Blocks with Advertised speeds of 25 Mbps or greater: 70,939

Appendix D: Broadband Adoption

[1] LinkIDAHO launched a consumer research survey during July 2010 in Idaho to ask residents about

broadband high-speed internet service. The focus of the research was to identify how households use broadband and the benefits that are derived from its use. A combination of telephone interviews and on-line surveys was used to capture this information.

[2] Most, 28.7%, of the 310 people who responded to the Region 3 survey about income refused to answer about their household income. However, 15.8% responded $50,000-$74,999 as their combine household income before taxes. Nearly 5% responded $150,000 or more, similarly 2.3% responded $100-149,000, and 6.8% responded 75,000-99,999. 41.7% of the survey responders, selected a household income less than $49,999, these included the following four categories: less than $15,000, $15,000 - $14,000, $25,000-$34,000, and $35,000-$49,000.

[3] Of the 310 people from Region 3 who responded to the survey and the question what is the last grade of class you completed in school, the majority, 30.5% responded high school graduate. Some college made up 24.9% and college graduates made up 23.9% of the Region 3 survey responders. Almost 13% of the respondents, selected advance degree. Just over 7% selected less than high school. Only 0.3% of the respondents refused to answer the question about the last grade completed in school.

[4] More than 37% of the Region 3 population access the internet from 1 to 3 hours per day. Of those who responded to the survey, 20.3% selected they access the Internet one hour or less per day. 22.7% selected 3 to 5 hours per day for the amount of time their household access the Internet. Only 10.5% of the region use the Internet for 7 or more hours per day.

[5] The majority of the population from Region 3 access the internet from a home computer. Of those who responded to the survey, 86.4% selected home computer as a device they use to access the internet. The second most selected category to access to Internet is a work computer at 53.9% followed by a school computer at 30.7%. 14.6% of those who responded selected computer anywhere else. Only 7.7% of Region 3 responded no one uses the Internet anywhere. Portable devices are not as commonly used as a traditional computer, 17.6% selected smart phone, 12.7% selected other mobile phone, and 12.4% selected other portable device that can access the Internet.

[6] People were asked to select all answers that apply when responding to the question about uses of the Internet. The majority of the Region 3 population access the internet to get news, weather, sports, or financial information. Of those who responded to the survey, 74.3% selected to get news, weather, sports, or financial information. The second most selected category for use of the Internet handle banking and/or investments at 74% followed by is research health issues at 70.9%. 66.9% of those who responded selected, buy or sell things. Only 22.3% of Region 3 responded Internet phone service VoIP. Work and education related tasks are not as commonly performed on the Internet as personal activities, 36.2% selected work from home, 36.5% selected search for job information, and 33.7% selected access educational services such as distance learning.

[7] The main reason people in Region 3 Southwestern Idaho, do not use the Internet is because they do not have a computer. Of those who do not use the Internet 36% responded I do not have a computer. The second highest response was tied, no need with 16% and I'm worries about others gaining access with 16%. 8% responded it is a waste of time and 8% also responded it is too difficult/frustrating. Only 4% of the Region 3 population do not know how to get Internet while another 4% responded it is not

available.